

NAVAJO GENERATING STATION

EXCESS EMISSIONS REPORT

FIRST QUARTER, 2018



NAVAJO GENERATING STATION

P. O. BOX 850

PAGE, ARIZONA 86040

April 30, 2018

Dr. Donald Benn, Executive Director
Navajo Nation Environmental Protection Agency
P.O. Box 339
Window Rock, AZ 86515
And
Navajo Nation EPA Air Quality Control Program
Operating Permit Program
Route 112, North Bldg. #2837
PO Box 529
Fort Defiance, AZ 86504

Director, Air Division
U.S. Environmental Protection Agency, Region IX
Mail Code: AIR-5
75 Hawthorne Street
San Francisco, CA 94105

RE: Navajo Generating Station FIP – 40 CFR §49.24, Title V Permit to Operate No. NN-ROP-05-06 and PSD Permit Number AZ 08-01 Quarterly Emission Report

Dear Directors,

Enclosed is the First Quarter 2018 emissions report for Navajo Generating Station. The report contains the following information:

- Daily electrical energy generated in megawatt-hours (permit condition II.B.5.b).
- Sulfur dioxide and carbon dioxide information according to the procedures set forth at 40 CFR 60.7 and permit condition II.B.5.a;
- Identification of periods when opacity values exceeded 20 %, excluding condensed uncombined water droplets over any 6-minute period, and 40% averaged over 6 minutes, during absorber upset transition periods.

Page Two (cover letter)
April 26, 2018

- Identification of periods when sulfur dioxide emissions exceeded 1.0 lb/mmBTU as a plantwide 3-hour average, and a CEMS data assessment according to the procedures set forth at 40 CFR §49.24(d)(1) of NGS FIP.
- Nitrogen Oxide and Carbon Monoxide information according to PSD Permit Number AZ 08-01A, condition IX.G.5

With respect to the opacity data presented in the report, please note that 6-minute opacity readings are not individually listed during scrubber operations because the saturated stack conditions impedes the accuracy of the readings. The report identifies the block time periods for each unit that the scrubbers were operational and the stacks were saturated, in lieu of reporting the individual 6-minute wet stack readings.

Please contact Paul Ostapuk at (928) 645-6577 if you have any questions.

Sincerely,



Kenneth J. Frazier
Plant Manager / Responsible Official

Enclosures

cc: William J. McClellan, SRP – Manager Air Quality & Environmental Services
Environmental File

CEM EXCESS EMISSION REPORT

Salt River Project
Navajo Generating Station
Page, Arizona

UNIT # 1, 2, 3 YEAR 2018 QUARTER FIRST

This report is in accordance with reporting requirements set forth in the NGS FIP – 40 CFR §49.24, Title V Permit to Operate, Permit No. NN-ROP 05-06, Section II.B.5 and PSD Permit Number AZ 08-01A, Condition IX.G.5.

Emission standards in this report are in accordance with the NGS FIP – 40 CFR §49.24 sections (d)(1), (d)(3), (d)(4), (e)(8), Title V Permit to Operate, NN-ROP-05-06 Section II.B.2 and PSD Permit Number AZ 08-01A Conditions IX.B.1 and IX.B.2

EXCESS EMISSIONS FOR QUARTER: None

NAVAJO GENERATING STATION
CEM SUMMARY SHEET
FIRST QUARTER OF 2018

| | <u>UNIT 1</u> | <u>UNIT 2</u> | <u>UNIT 3</u> |
|------------------------------------------------------------------------------------|---------------|---------------|---------------|
| # Hours of I.D. Fan Operation | 2058.2 hrs | 1988.5 hrs | 2064.3 hrs |
| # Hours Boiler Operation | 2030.9 hrs | 1964.9 hrs | 2035.7 hrs |
| Opacity Monitor Availability | 99.98 % | 98.20 % | 99.92 % |
| SO2 #/mmBTU Availability | 99.46 % | 99.39 % | 99.95 % |
| NOx #/mmBTU Availability | 99.36 % | 97.97 % | 99.95 % |
| CO #/mmBTU Availability | 99.80 % | 100 % | 100 % |
| Opacity Emission >20% (6-Min) | 0.0 hrs | 0.0 hrs | 0.0 hrs |
| % Operating Time | 0.00 % | 0.00 % | 0.00 % |
| Opacity Emission >40% (6-Min) | 0.0 hrs | 0.0 hrs | 0.0 hrs |
| % Operating Time | 0.00 % | 0.00 % | 0.00 % |
| SO2 #/mmBTU > 0.1 (365BOD) | 0.0 days | 0.0 days | 0.0 days |
| % Operating Time | 0.00 % | 0.00 % | 0.00 % |
| SO2 #/mmBTU >1.0 (3Hr) | 0.0 days | 0.0 days | 0.0 days |
| % Operating Time | 0.0 % | 0.0 % | 0.0 % |
| NOx #/mmBTU >0.24 (30D) | 0.0 days | 0.0 days | 0.0 days |
| % Operating Time | 0.0 % | 0.0 % | 0.0 % |
| CO #/mmBTU >0.23 (30D) | 0.0 days | 0.0 days | 0.0 days |
| % Operating Time | 0.0 % | 0.0 % | 0.0 % |
| CO #/mmBTU >0.15 (12M) | 0.0 days | 0.0 days | 0.0 days |
| % Operating Time | 0.0 % | 0.0 % | 0.0 % |
| Plant Coal, Ash and Road Sweeping Activities - Opacity Emission \geq 20% (hours) | 0.0 hrs | | |

**NAVAJO GENERATING STATION
CEMS MONITOR LISTING**

Teledyne Monitor Labs Inc.
Opacity Monitor
Model Lighthawk 560

Teledyne Monitor Labs Inc.
Flow Monitor
Ultra Flow 150

Thermo Environmental Sulfur Dioxide Monitor
Model 43i

Thermo Environmental CO₂ Monitor
Model 410i

Thermo Environmental NO_x Monitor
Model 42i

Thermo Environmental CO Monitor
Model 48i

UNIT 1 REPORT SUMMARY

- Daily Electric Energy Report
- Opacity Excess Emission and Monitoring System Performance
- Excess Wet Opacity Report
- Excess Dry Opacity Report
- Opacity Downtime Report
- SO₂ Excess Emission and Monitoring System Performance
- SO₂ Excess Emission Report – 1.0 lb/mmBTU
- SO₂ Excess Emission Report – 0.1 lb/mmBTU
- SO₂ Downtime Report
- CO₂ Downtime Report
- NO_x Excess Emission Report
- NO_x Downtime Report
- CO Excess Emission Report- 30-Day
- CO Excess Emission Report- 12-Month
- CO Downtime Report

40 CFR 52.145.d.5.iii Daily Electric Energy Report
Gigawatt Hours

Source: Unit 1 Channel: 1 GW365

Report for 01/01/2018 thru 03/31/2018

| Date | Gigawatts | Date | Gigawatts | Date | Gigawatts |
|----------|-----------|----------|-----------|----------|-----------|
| 01/01/18 | 17.30 | 02/01/18 | 14.05 | 03/01/18 | 15.33 |
| 01/02/18 | 16.90 | 02/02/18 | 14.55 | 03/02/18 | 14.72 |
| 01/03/18 | 17.90 | 02/03/18 | 12.95 | 03/03/18 | 14.05 |
| 01/04/18 | 17.74 | 02/04/18 | 12.16 | 03/04/18 | ----- |
| 01/05/18 | 17.18 | 02/05/18 | 12.62 | 03/05/18 | ----- |
| 01/06/18 | 16.16 | 02/06/18 | 12.28 | 03/06/18 | ----- |
| 01/07/18 | 15.51 | 02/07/18 | 12.38 | 03/07/18 | ----- |
| 01/08/18 | 16.58 | 02/08/18 | 12.73 | 03/08/18 | ----- |
| 01/09/18 | 16.33 | 02/09/18 | 13.15 | 03/09/18 | 9.67 |
| 01/10/18 | 14.82 | 02/10/18 | ----- | 03/10/18 | 9.16 |
| 01/11/18 | 14.56 | 02/11/18 | ----- | 03/11/18 | 11.39 |
| 01/12/18 | 16.81 | 02/12/18 | ----- | 03/12/18 | 13.08 |
| 01/13/18 | 14.51 | 02/13/18 | ----- | 03/13/18 | 14.78 |
| 01/14/18 | 14.15 | 02/14/18 | 14.80 | 03/14/18 | 14.23 |
| 01/15/18 | 15.65 | 02/15/18 | 15.27 | 03/15/18 | 11.85 |
| 01/16/18 | 16.75 | 02/16/18 | 17.21 | 03/16/18 | 12.22 |
| 01/17/18 | ----- | 02/17/18 | 15.49 | 03/17/18 | 11.59 |
| 01/18/18 | 15.91 | 02/18/18 | 13.02 | 03/18/18 | 12.40 |
| 01/19/18 | 15.00 | 02/19/18 | 14.86 | 03/19/18 | 12.57 |
| 01/20/18 | 16.25 | 02/20/18 | 15.97 | 03/20/18 | 11.87 |
| 01/21/18 | 15.44 | 02/21/18 | 17.84 | 03/21/18 | 11.83 |
| 01/22/18 | 17.92 | 02/22/18 | 17.78 | 03/22/18 | 11.29 |
| 01/23/18 | 16.44 | 02/23/18 | 16.94 | 03/23/18 | 13.28 |
| 01/24/18 | 17.54 | 02/24/18 | 16.53 | 03/24/18 | 10.13 |
| 01/25/18 | 16.62 | 02/25/18 | 15.67 | 03/25/18 | 13.30 |
| 01/26/18 | 15.59 | 02/26/18 | 14.77 | 03/26/18 | 13.64 |
| 01/27/18 | 15.21 | 02/27/18 | 15.12 | 03/27/18 | 14.64 |
| 01/28/18 | ----- | 02/28/18 | 15.56 | 03/28/18 | 15.13 |
| 01/29/18 | ----- | | | 03/29/18 | 15.82 |
| 01/30/18 | ----- | | | 03/30/18 | 15.83 |
| 01/31/18 | ----- | | | 03/31/18 | 15.11 |

----- Invalid Boiler Operating Day

40 CFR Part 60
CEM Quarterly Report
Excess Emission and Monitoring System Performance

Reporting dates 01/01/2018 00:00 through 03/31/2018 23:59

Pollutant: Opacity / "1 Opacity"
Emission Limit: 40

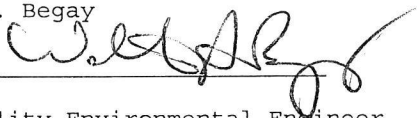
Company Name: SRP - Navajo, Unit 1
Address: Navajo Generating Station Page, AZ 86040
Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2058.2 hours

| Emission Data Summary(note 1) | | CEMS Downtime Summary(note 1) | |
|-------------------------------------------------------------------------------------------------------------------|--------|------------------------------------------------|-------|
| 1. Duration of excess emissions in period due to: | | 1. Duration of CEMS downtime in period due to: | |
| a. Start Up/Shut Down..... | 0.0 | a. Monitoring Equipment Malfunction..... | 0.0 |
| b. Control Equipment Failure..... | 0.0 | b. Non-Monitoring Equipment Malfunction... | 0.0 |
| c. Process Problems..... | 0.0 | c. Quality Assurance..... | 0.0 |
| d. Exempt (Wet Stack - Scrubber Operation) | 2058.2 | d. Other Known Monitor Downtime Cause..... | 0.5 |
| e. UnKnown Excess Emissions Cause..... | 0.0 | e. UnKnown Monitor Downtime Cause..... | 0.0 |
| 2. Total duration of excess emission..... | 0.0 | 2. Total duration of CEMS downtime..... | 0.5 |
| 3. Excess emission duration (%)..... | 0.00% | 3. CEMS downtime (%)..... | 0.02% |
| Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time. | | | |

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: Walter H. Begay

Signature: 

Title: Air Quality Environmental Engineer

Date: 

Navajo Unit 1 Excess Wet Opacity Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 1 EPISODE: Opacity Over Limit

| Incident Start | Incident End | Length Hours | Reason | Action |
|---------------------------------|-----------------|-----------------|------------------------|--------|
| 01/01/18 00:00 - 01/29/18 11:50 | | 683.8 | Wet Scrubber Operation | Exempt |
| 01/31/18 03:42 - 02/11/18 04:44 | | 265.0 | Wet Scrubber Operation | Exempt |
| 02/11/18 11:05 - 03/05/18 09:05 | | 526.0 | Wet Scrubber Operation | Exempt |
| 03/07/18 16:37 - 03/31/18 23:59 | | 583.4 | Wet Scrubber Operation | Exempt |

Total Duration: 2058.2 Hours

Navajo Unit 1 Excess Dry Opacity Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 1 EPISODE: Opacity Over Limit

| Incident Start | Incident End | Length Hours | Reason |
|-------------------|-----------------|-----------------|--------|
|-------------------|-----------------|-----------------|--------|

No Excess Emissions

Total Duration 0.0 Hours

Navajo Unit 1 Opacity Downtime Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 1 EPISODE: Opacity Analyzer Downtime

| Incident Start | Incident End | Length Mins. | Reason |
|---------------------------------|-----------------|-----------------|-------------------------------------|
| 01/16/18 10:36 - 01/16/18 10:41 | | 06 | Preventative Maintenance Activities |
| 02/20/18 14:51 - 02/20/18 15:05 | | 12 | Preventative Maintenance Activities |
| 03/22/18 13:36 - 03/22/18 13:41 | | 06 | Preventative Maintenance Activities |
| 03/28/18 09:30 - 03/28/18 09:35 | | 06 | Preventative Maintenance Activities |

TOTAL DURATION = 0.5 Hours

40 CFR Part 60
CEM Quarterly Report
Excess Emission and Monitoring System Performance

Reporting dates 01/01/2018 00:00 through 03/31/2018 23:59

Pollutant: SO2 lb/MMBtu (365 Boiler Operating Day rolling average)
Emission Limit: 0.1

Company Name: SRP - Navajo, Unit 1
Address: Navajo Generating Station Page, AZ 86040
Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2030.9 hours

| Emission Data Summary(note 1) | | CEMS Downtime Summary(note 1) | |
|-------------------------------------------------------------------------------------------------------------------|-------|------------------------------------------------|-------|
| 1. Duration of excess emissions in period due to: | | 1. Duration of CEMS downtime in period due to: | |
| a. Start Up/Shut Down..... | 0.0 | a. Monitoring Equipment Malfunction..... | 0.0 |
| b. Control Equipment Failure..... | 0.0 | b. Non-Monitoring Equipment Malfunction... | 2.0 |
| c. Process Problems..... | 0.0 | c. Quality Assurance..... | 4.0 |
| d. Exempt (Wet Stack - Scrubber Operation) | 0.0 | d. Other Known Monitor Downtime Cause..... | 5.0 |
| e. UnKnown Excess Emissions Cause..... | 0.0 | e. UnKnown Monitor Downtime Cause..... | 0.0 |
| 2. Total duration of excess emission..... | 0.0 | 2. Total duration of CEMS downtime..... | 11.0 |
| 3. Excess emission duration (%)..... | 0.00% | 3. CEMS downtime (%)..... | 0.54% |
| Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time. | | | |

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: Walter H. Begay

Signature: Walter H. Begay

Title: Air Quality Environmental Engineer

Date: 4/26/18

Navajo Unit 1 SO2 Excess Emission Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 1.0 lb/MMBtu, 3 hr. plant wide average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 SO2 Excess Emission Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.1 lb/MMBtu, 365 BOD rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 1 SO2 Downtime Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 SO2 ppm SOURCE: Unit 1 EPISODE: SO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------------|
| 01/31/18 09:00 - 01/31/18 10:59 | | 2 | Non-Monitor Maintenance |
| 02/01/18 15:00 - 02/01/18 17:59 | | 3 | Quality Assurance Activities |
| 02/11/18 15:00 - 02/11/18 15:59 | | 1 | Other Known Monitor Downtime Cause |
| 02/11/18 19:00 - 02/11/18 22:59 | | 4 | Other Known Monitor Downtime Cause |
| 03/27/18 10:00 - 03/27/18 10:59 | | 1 | Quality Assurance Activity |

Total Duration = 11.0 hrs

Navajo Unit 1 CO2 Downtime Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 1/01/2018 00:00
End: 3/31/2018 23:59

POLLUTANT: 1 CO2 cor SOURCE: Unit 1 EPISODE: CO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------------|
| 01/31/18 09:00 - 01/31/18 10:59 | | 2 | Non-Monitor Maintenance - Dilution |
| 02/01/18 15:00 - 02/01/18 17:59 | | 3 | Quality Assurance Activity |
| 02/11/18 15:00 - 02/11/18 15:59 | | 1 | Other Known Monitor Downtime Cause |
| 02/11/18 19:00 - 02/11/18 22:59 | | 4 | Other Known Monitor Downtime Cause |
| 02/27/18 09:00 - 02/27/18 09:59 | | 1 | Quality Assurance Activity |
| 02/27/18 10:00 - 02/27/18 10:59 | | 1 | Monitor in Calibration (non-daily) |
| 03/27/18 10:00 - 03/27/18 10:59 | | 1 | Quality Assurance Activity |

Total Duration = 13.0 hrs

Navajo Unit 1 NOx Excess Emission Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.24 lb/MMBtu, 30 Day rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
| No Excess Emission | | |

Total Duration = 0.0 hrs

Navajo Unit 1 NOx Downtime Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 NOx cor SOURCE: Unit 1 EPISODE: NOx Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------------|
| 01/31/18 09:00 - 01/31/18 10:59 | | 2 | Non-Monitor Maintenance |
| 02/01/18 15:00 - 02/01/18 17:59 | | 3 | Quality Assurance Activities |
| 02/11/18 15:00 - 02/11/18 15:59 | | 1 | Other Known Monitor Downtime Cause |
| 02/11/18 19:00 - 02/11/18 22:59 | | 4 | Other Known Monitor Downtime Cause |
| 02/27/18 09:00 - 02/27/18 10:59 | | 2 | Quality Assurance Activities |
| 03/27/18 10:00 - 03/27/18 10:59 | | 1 | Quality Assurance Activities |

Total Duration = 13.0 hrs

Navajo Unit 1 CO Excess Emission Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.23 lb/MMBtu, 30 Day rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emissions

Total Duration = 0.0 hrs.

Navajo Unit 1 CO Excess Emission Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.15 lb/MMBtu, 12-Month rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
| No Excess Emission | | |

Total Duration = 0.0 hrs

Navajo Unit 1 CO Downtime Report

SRP - Navajo, Unit 1
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 CO cor SOURCE: Unit 1 EPISODE: CO Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------------|
| 01/31/18 09:00 - 01/31/18 09:59 | | 1 | Non-Monitor Maintenance - Dilution |
| 02/01/18 15:00 - 02/01/18 17:59 | | 3 | Quality Assurance Activity |

Total Duration = 4.0 hrs

UNIT 2 REPORT SUMMARY

- Daily Electric Energy Report
- Opacity Excess Emission and Monitoring System Performance
- Excess Wet Opacity Report
- Excess Dry Opacity Report
- Opacity Downtime Report
- SO₂ Excess Emission and Monitoring System Performance
- SO₂ Excess Emission Report – 1.0 lb/mmBTU
- SO₂ Excess Emission Report – 0.1 lb/mmBTU
- SO₂ Downtime Report
- CO₂ Downtime Report
- NO_x Excess Emission Report
- NO_x Downtime Report
- CO Excess Emission Report- 30-Day
- CO Excess Emission Report- 12-Month
- CO Downtime Report

40 CFR 52.145.d.5.iii Daily Electric Energy Report
Gigawatt Hours

Source: Unit 2 Channel: 2 GW365

Report for 01/01/2018 thru 03/31/2018

| Date | Gigawatts | Date | Gigawatts | Date | Gigawatts |
|----------|-----------|----------|-----------|----------|-----------|
| 01/01/18 | ----- | 02/01/18 | 15.71 | 03/01/18 | 12.08 |
| 01/02/18 | 11.30 | 02/02/18 | 14.64 | 03/02/18 | 12.60 |
| 01/03/18 | 17.70 | 02/03/18 | 12.44 | 03/03/18 | 12.00 |
| 01/04/18 | 17.42 | 02/04/18 | 11.70 | 03/04/18 | 13.30 |
| 01/05/18 | 17.01 | 02/05/18 | 12.50 | 03/05/18 | 16.98 |
| 01/06/18 | 15.82 | 02/06/18 | 12.27 | 03/06/18 | 16.40 |
| 01/07/18 | 15.45 | 02/07/18 | 12.84 | 03/07/18 | 18.24 |
| 01/08/18 | 16.19 | 02/08/18 | 13.50 | 03/08/18 | ----- |
| 01/09/18 | 15.86 | 02/09/18 | 14.67 | 03/09/18 | ----- |
| 01/10/18 | 14.27 | 02/10/18 | 14.58 | 03/10/18 | 13.54 |
| 01/11/18 | 13.58 | 02/11/18 | 15.00 | 03/11/18 | 12.66 |
| 01/12/18 | 14.66 | 02/12/18 | 13.67 | 03/12/18 | 13.93 |
| 01/13/18 | 15.78 | 02/13/18 | 15.15 | 03/13/18 | 14.24 |
| 01/14/18 | 15.96 | 02/14/18 | 16.02 | 03/14/18 | 14.88 |
| 01/15/18 | 16.09 | 02/15/18 | 15.45 | 03/15/18 | 12.38 |
| 01/16/18 | 17.95 | 02/16/18 | 17.12 | 03/16/18 | 14.09 |
| 01/17/18 | 16.87 | 02/17/18 | 15.59 | 03/17/18 | 13.98 |
| 01/18/18 | 17.51 | 02/18/18 | 13.18 | 03/18/18 | 13.51 |
| 01/19/18 | 15.10 | 02/19/18 | 15.18 | 03/19/18 | 14.07 |
| 01/20/18 | 16.17 | 02/20/18 | 16.32 | 03/20/18 | 13.83 |
| 01/21/18 | 16.38 | 02/21/18 | 18.20 | 03/21/18 | 13.99 |
| 01/22/18 | ----- | 02/22/18 | 17.63 | 03/22/18 | 13.77 |
| 01/23/18 | 17.22 | 02/23/18 | 17.26 | 03/23/18 | 14.33 |
| 01/24/18 | 17.99 | 02/24/18 | 16.80 | 03/24/18 | 13.15 |
| 01/25/18 | 16.52 | 02/25/18 | 16.21 | 03/25/18 | ----- |
| 01/26/18 | 15.70 | 02/26/18 | 15.02 | 03/26/18 | ----- |
| 01/27/18 | 15.07 | 02/27/18 | 15.34 | 03/27/18 | ----- |
| 01/28/18 | 14.84 | 02/28/18 | 12.36 | 03/28/18 | ----- |
| 01/29/18 | 17.85 | | | 03/29/18 | ----- |
| 01/30/18 | 17.34 | | | 03/30/18 | ----- |
| 01/31/18 | 15.61 | | | 03/31/18 | ----- |

----- Invalid Boiler Operating Day

40 CFR Part 60
CEM Quarterly Report
Excess Emission and Monitoring System Performance

Reporting dates 01/01/2018 00:00 through 03/31/2018 23:59

Pollutant: Opacity / "2 Opacity"
Emission Limit: 40

Company Name: SRP - Navajo, Unit 2
Address: Navajo Generating Station Page, AZ 86040
Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 1988.5 hours

| Emission Data Summary(note 1) | | CEMS Downtime Summary(note 1) | |
|---------------------------------------------------|--------|------------------------------------------------|-------|
| 1. Duration of excess emissions in period due to: | | 1. Duration of CEMS downtime in period due to: | |
| a. Start Up/Shut Down..... | 0.0 | a. Monitoring Equipment Malfunction..... | 0.0 |
| b. Control Equipment Failure..... | 0.0 | b. Non-Monitoring Equipment Malfunction... | 0.0 |
| c. Process Problems..... | 0.0 | c. Quality Assurance..... | 1.0 |
| d. Exempt (Wet Stack - Scrubber Operation) | 1988.5 | d. Other Known Monitor Downtime Cause..... | 34.7 |
| e. UnKnown Excess Emissions Cause..... | 0.0 | e. UnKnown Monitor Downtime Cause..... | 0.0 |
| 2. Total duration of excess emission..... | 0.0 | 2. Total duration of CEMS downtime..... | 35.7 |
| 3. Excess emission duration (%)..... | 0.00% | 3. CEMS downtime (%)..... | 1.80% |

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: Walter H. Begay

Signature: Walter H. Begay

Title: Air Quality Environmental Engineer

Date: 4/26/18

Navajo Unit 2 Excess Wet Opacity Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 2 Opacity SOURCE: Unit 2 EPISODE: Opacity Over Limit

| Incident Start | Incident End | Length Hours | Reason | Action |
|---------------------------------|-----------------|-----------------|------------------------|--------|
| 01/01/18 17:45 - 03/08/18 13:58 | | 1580.2 | Wet Scrubber Operation | Exempt |
| 03/09/18 10:14 - 03/25/18 16:19 | | 390.1 | Wet Scrubber Operation | Exempt |
| 03/31/18 05:45 - 03/31/18 23:59 | | 18.2 | Wet Scrubber Operation | Exempt |

Total Duration: 1988.5 Hours

Navajo Unit 2 Excess Dry Opacity Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 2 EPISODE: Opacity Over Limit

| Incident Start | Incident End | Length Hours | Reason |
|-------------------|-----------------|-----------------|--------|
|-------------------|-----------------|-----------------|--------|

No Excess Emissions

Total Duration 0.0 Hours

Navajo Unit 2 Opacity Downtime Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 2 Opacity SOURCE: Unit 2 EPISODE: Opacity Analyzer Downtime

| Incident Start | Incident End | Length Mins. | Reason |
|---------------------------------|-----------------|------------------------------------|--------|
| 01/16/18 09:58 - 01/16/18 09:53 | 06 | Monitor Maintenance Activities | |
| 01/30/18 10:24 - 01/30/18 10:29 | 06 | Monitor Maintenance Activities | |
| 02/04/18 08:06 - 02/04/18 08:17 | 12 | Monitor Maintenance Activities | |
| 02/16/18 18:18 - 02/16/18 19:47 | 90 | Non-Monitor Maintenance Activities | |
| 02/16/18 19:54 - 02/16/18 02:23 | 390 | Non-Monitor Maintenance Activities | |
| 02/17/18 02:30 - 02/17/18 02:59 | 30 | Non-Monitor Maintenance Activities | |
| 02/17/18 03:06 - 02/17/18 03:35 | 30 | Non-Monitor Maintenance Activities | |
| 02/17/18 03:42 - 02/17/18 03:53 | 12 | Non-Monitor Maintenance Activities | |
| 02/17/18 04:00 - 02/17/18 04:29 | 30 | Non-Monitor Maintenance Activities | |
| 02/17/18 04:36 - 02/17/18 04:59 | 24 | Non-Monitor Maintenance Activities | |
| 02/17/18 05:06 - 02/17/18 05:29 | 24 | Non-Monitor Maintenance Activities | |
| 02/17/18 05:42 - 02/17/18 10:53 | 312 | Non-Monitor Maintenance Activities | |
| 02/17/18 11:00 - 02/18/18 05:29 | 1110 | Non-Monitor Maintenance Activities | |
| 02/20/18 10:24 - 02/20/18 10:29 | 06 | Monitor Maintenance Activities | |
| 03/20/18 14:24 - 03/20/18 15:23 | 60 | Quality Assurance Activities | |

TOTAL DURATION = 35.7 Hours

40 CFR Part 60
CEM Quarterly Report
Excess Emission and Monitoring System Performance

Reporting dates 01/01/2018 00:00 through 03/31/2018 23:59

Pollutant: SO2 lb/MMBtu (365 Boiler Operating Day rolling average)
Emission Limit: 0.1

Company Name: SRP - Navajo, Unit 2
Address: Navajo Generating Station Page, AZ 86040
Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 1964.9 hours

| Emission Data Summary(note 1) | | CEMS Downtime Summary(note 1) | |
|---------------------------------------------------|-------|------------------------------------------------|-------|
| 1. Duration of excess emissions in period due to: | | 1. Duration of CEMS downtime in period due to: | |
| a. Start Up/Shut Down..... | 0.0 | a. Monitoring Equipment Malfunction..... | 0.0 |
| b. Control Equipment Failure..... | 0.0 | b. Non-Monitoring Equipment Malfunction... | 0.0 |
| c. Process Problems..... | 0.0 | c. Quality Assurance..... | 7.0 |
| d. Exempt (Wet Stack - Scrubber Operation) | 0.0 | d. Other Known Monitor Downtime Cause..... | 0.0 |
| e. UnKnown Excess Emissions Cause..... | 0.0 | e. UnKnown Monitor Downtime Cause..... | 5.0 |
| 2. Total duration of excess emission..... | 0.0 | 2. Total duration of CEMS downtime..... | 12.0 |
| 3. Excess emission duration (%)..... | 0.00% | 3. CEMS downtime (%)..... | 0.61% |

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: Walter H. Begay

Signature: Walter H. Begay

Title: Air Quality Environmental Engineer

Date: 4/26/18

Navajo Unit 2 SO2 Excess Emission Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 1.0 lb/MMBtu, 3 hr. plant wide average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 SO2 Excess Emission Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.1 lb/MMBtu, 365 BOD rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 SO2 Downtime Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 2 SO2 ppm SOURCE: Unit 2 EPISODE: SO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|--------------------------------|
| 02/22/18 10:00 - 02/22/18 10:59 | | 1 | Quality Assurance Activity |
| 02/22/18 13:00 - 02/22/18 14:59 | | 2 | Quality Assurance Activity |
| 03/12/18 13:00 - 03/12/18 13:59 | | 1 | Quality Assurance Activity |
| 03/12/18 16:00 - 03/12/18 16:59 | | 1 | Quality Assurance Activity |
| 03/13/18 07:00 - 03/13/18 07:59 | | 1 | Quality Assurance Activity |
| 03/31/18 05:00 - 03/31/18 05:59 | | 1 | Quality Assurance Activity |
| 03/31/18 16:00 - 03/31/18 20:59 | | 5 | Unknown Monitor Downtime Cause |

Total Duration = 12.0 hrs

Navajo Unit 2 CO2 Downtime Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 2 CO2 cor SOURCE: Unit 2 EPISODE: CO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|--------------------------------|
| 02/22/18 10:00 - 02/22/18 10:59 | | 1 | Quality Assurance Activity |
| 02/22/18 13:00 - 02/22/18 14:59 | | 2 | Quality Assurance Activity |
| 03/12/18 13:00 - 03/12/18 13:59 | | 1 | Quality Assurance Activity |
| 03/12/18 16:00 - 03/12/18 16:59 | | 1 | Quality Assurance Activity |
| 03/13/18 07:00 - 03/13/18 07:59 | | 1 | Quality Assurance Activity |
| 03/31/18 05:00 - 03/31/18 05:59 | | 1 | Quality Assurance Activity |
| 03/31/18 16:00 - 03/31/18 20:59 | | 5 | Unknown Monitor Downtime Cause |

Total Duration = 12.0 hrs

Navajo Unit 2 NOx Excess Emission Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.24 lb/MMBtu, 30 Day rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 NOx Downtime Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 2 NOx cor SOURCE: Unit 2 EPISODE: NOx Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|----------------------------------|
| 01/28/18 05:00 - 01/28/18 08:59 | | 4 | Quality Assurance Activities |
| 02/10/18 05:00 - 02/10/18 07:59 | | 3 | NOx Analyzer Problem |
| 02/13/18 05:00 - 02/13/18 07:59 | | 3 | NOx Analyzer Calibration Failure |
| 02/15/18 05:00 - 02/15/18 07:59 | | 3 | NOx Analyzer Problem |
| 02/19/18 05:00 - 02/19/18 06:59 | | 2 | NOx Analyzer Problem |
| 02/22/18 10:00 - 02/22/18 10:59 | | 1 | Quality Assurance Activities |
| 02/22/18 13:00 - 02/22/18 14:59 | | 2 | Quality Assurance Activities |
| 03/09/18 21:00 - 03/10/18 08:59 | | 12 | Monitor Equipment Malfunction |
| 03/11/18 06:00 - 03/11/18 06:59 | | 1 | NOx Analyzer Problem |
| 03/12/18 13:00 - 03/12/18 13:59 | | 1 | Quality Assurance Activities |
| 03/12/18 16:00 - 03/12/18 16:59 | | 1 | Quality Assurance Activities |
| 03/13/18 07:00 - 03/13/18 07:59 | | 1 | Quality Assurance Activities |
| 03/31/18 05:00 - 03/31/18 05:59 | | 1 | NOx Analyzer Problem |
| 03/31/18 16:00 - 03/31/18 20:59 | | 5 | Unknown Monitor Downtime Cause |

Total Duration = 40.0 hrs

Navajo Unit 2 CO Excess Emission Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.23 lb/MMBtu, 30 Day rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 CO Excess Emission Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.15 lb/MMBtu, 12-Month rolling average

| Date and Time Period | Magnitude | Reason |
|----------------------|-----------|--------|
|----------------------|-----------|--------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 2 CO Downtime Report

SRP - Navajo, Unit 2
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 2 CO cor SOURCE: Unit 2 EPISODE: CO Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|-------------------|-----------------|----------------|--------|
| <hr/> | | | |
| None | | | |

Total Duration = 0.0 hrs

UNIT 3 REPORT SUMMARY

- Daily Electric Energy Report
- Opacity Excess Emission and Monitoring System Performance
- Excess Wet Opacity Report
- Excess Dry Opacity Report
- Opacity Downtime Report
- SO₂ Excess Emission and Monitoring System Performance
- SO₂ Excess Emission Report – 1.0 lb/mmBTU
- SO₂ Excess Emission Report – 0.1 lb/mmBTU
- SO₂ Downtime Report
- CO₂ Downtime Report
- NO_x Excess Emission Report
- NO_x Downtime Report
- CO Excess Emission Report- 30-Day
- CO Excess Emission Report- 12-Month
- CO Downtime Report

40 CFR 52.145.d.5.iii Daily Electric Energy Report
Gigawatt Hours

Source: Unit 3 Channel: 3 GW365

Report for 01/01/2018 thru 03/31/2018

| Date | Gigawatts | Date | Gigawatts | Date | Gigawatts |
|----------|-----------|----------|-----------|----------|-----------|
| 01/01/18 | 17.21 | 02/01/18 | 15.69 | 03/01/18 | 14.80 |
| 01/02/18 | 17.16 | 02/02/18 | 14.72 | 03/02/18 | 14.46 |
| 01/01/18 | 17.86 | 02/03/18 | 12.45 | 03/03/18 | 13.66 |
| 01/04/18 | 16.55 | 02/04/18 | 12.48 | 03/04/18 | 13.87 |
| 01/05/18 | 17.44 | 02/05/18 | 12.93 | 03/05/18 | 16.51 |
| 01/06/18 | 16.51 | 02/06/18 | 12.43 | 03/06/18 | 16.48 |
| 01/07/18 | 15.44 | 02/07/18 | 13.07 | 03/07/18 | 17.81 |
| 01/08/18 | 16.43 | 02/08/18 | 13.17 | 03/08/18 | 16.20 |
| 01/09/18 | 15.48 | 02/09/18 | 13.61 | 03/09/18 | 17.32 |
| 01/10/18 | 13.60 | 02/10/18 | 14.14 | 03/10/18 | 13.15 |
| 01/11/18 | 13.92 | 02/11/18 | 14.25 | 03/11/18 | 11.62 |
| 01/12/18 | 14.83 | 02/12/18 | 12.32 | 03/12/18 | 13.19 |
| 01/13/18 | 16.29 | 02/13/18 | 13.64 | 03/13/18 | 14.18 |
| 01/14/18 | 15.98 | 02/14/18 | 15.63 | 03/14/18 | 14.81 |
| 01/15/18 | ----- | 02/15/18 | 15.92 | 03/15/18 | 12.03 |
| 01/16/18 | ----- | 02/16/18 | 17.66 | 03/16/18 | 12.28 |
| 01/17/18 | ----- | 02/17/18 | 15.75 | 03/17/18 | 12.02 |
| 01/18/18 | ----- | 02/18/18 | 13.24 | 03/18/18 | 12.48 |
| 01/19/18 | 15.32 | 02/19/18 | 14.51 | 03/19/18 | 12.18 |
| 01/20/18 | ----- | 02/20/18 | 15.40 | 03/20/18 | 11.88 |
| 01/21/18 | 16.65 | 02/21/18 | 17.34 | 03/21/18 | 11.88 |
| 01/22/18 | 17.73 | 02/22/18 | 17.54 | 03/22/18 | 12.04 |
| 01/23/18 | ----- | 02/23/18 | 16.98 | 03/23/18 | 12.69 |
| 01/24/18 | ----- | 02/24/18 | 16.77 | 03/24/18 | 10.73 |
| 01/25/18 | 15.29 | 02/25/18 | 16.25 | 03/25/18 | 12.99 |
| 01/26/18 | 15.58 | 02/26/18 | 14.96 | 03/26/18 | 13.29 |
| 01/27/18 | 15.65 | 02/27/18 | 15.20 | 03/27/18 | ----- |
| 01/28/18 | 14.53 | 02/28/18 | 15.14 | 03/28/18 | ----- |
| 01/29/18 | 17.84 | | | 03/29/18 | ----- |
| 01/30/18 | 17.07 | | | 03/30/18 | ----- |
| 01/31/18 | 15.58 | | | 03/31/18 | ----- |

----- Invalid Boiler Operating Day

40 CFR Part 60
CEM Quarterly Report
Excess Emission and Monitoring System Performance

Reporting dates 01/01/2018 00:00 through 03/31/2018 23:59

Pollutant: Opacity / "3 Opacity"
Emission Limit: 40

Company Name: SRP - Navajo, Unit 3
Address: Navajo Generating Station Page, AZ 86040
Unit Description: coal-fired cyclonic boiler power plant

Total source operating time in reporting period: 2064.3 hours

| Emission Data Summary(note 1) | | CEMS Downtime Summary(note 1) | |
|---------------------------------------------------|--------|------------------------------------------------|-------|
| 1. Duration of excess emissions in period due to: | | 1. Duration of CEMS downtime in period due to: | |
| a. Start Up/Shut Down..... | 0.0 | a. Monitoring Equipment Malfunction..... | 0.0 |
| b. Control Equipment Failure..... | 0.0 | b. Non-Monitoring Equipment Malfunction... | 0.0 |
| c. Process Problems..... | 0.0 | c. Quality Assurance..... | 0.9 |
| d. Exempt (Wet Stack - Scrubber Operation) | 2064.3 | d. Other Known Monitor Downtime Cause..... | 0.8 |
| e. UnKnown Excess Emissions Cause..... | 0.0 | e. UnKnown Monitor Downtime Cause..... | 0.0 |
| 2. Total duration of excess emission..... | 0.0 | 2. Total duration of CEMS downtime..... | 1.7 |
| 3. Excess emission duration (%)..... | 0.0% | 3. CEMS downtime (%)..... | 0.08% |

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

*Please see cover letter and attached "Written Notification Report for Excess Emissions and Control System Outage" for explanation of potential excess emissions.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: Walter H. Begay

Signature: Walter H. Begay

Title: Air Quality Environmental Engineer

Date: 4/26/18

Navajo Unit 3 Excess Wet Opacity Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 3 Opacity SOURCE: Unit 3 EPISODE: Opacity Over Limit

| Incident Start | Incident End | Length Hours | Reason | Action |
|---------------------------------|-----------------|-----------------|------------------------|--------|
| 01/01/18 00:00 - 01/16/18 04:26 | | 364.9 | Wet Scrubber Operation | Exempt |
| 01/17/18 22:55 - 03/29/18 18:45 | | 1705.2 | Wet Scrubber Operation | Exempt |
| 03/31/18 23:59 - 03/31/18 23:59 | | 0.0 | Wet Scrubber Operation | Exempt |

Total Duration: 2064.3 Hours

Navajo Unit 3 Excess Dry Opacity Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 1 Opacity SOURCE: Unit 3 EPISODE: Opacity Over Limit

| Incident Start | Incident End | Length Hours | Reason |
|-------------------|-----------------|-----------------|--------|
|-------------------|-----------------|-----------------|--------|

No Excess Emissions

Total Duration 0.0 Hours

Navajo Unit 3 Opacity Downtime Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 3 Opacity SOURCE: Unit 3 EPISODE: Opacity Analyzer Downtime

| Incident Start | Incident End | Length Mins. | Reason |
|---------------------------------|-----------------|-----------------|--------------------------------|
| 01/15/18 09:42 - 01/15/18 09:53 | | 12 | Monitor Maintenance Activities |
| 01/30/18 09:54 - 01/30/18 09:59 | | 06 | Monitor Maintenance Activities |
| 02/20/18 09:54 - 02/20/18 09:59 | | 06 | Monitor Maintenance Activities |
| 03/01/18 15:48 - 03/01/18 15:53 | | 06 | Monitor Maintenance Activities |
| 03/08/18 15:18 - 03/08/18 15:23 | | 06 | Monitor Maintenance Activities |
| 03/19/18 10:36 - 03/19/18 10:41 | | 06 | Monitor Maintenance Activities |
| 03/20/18 16:00 - 03/20/18 16:53 | | 54 | Quality Assurance Activities |
| 03/28/18 10:24 - 03/28/18 10:29 | | 06 | Monitor Maintenance Activities |

TOTAL DURATION = 1.7 Hours

40 CFR Part 60
CEM Quarterly Report
Excess Emission and Monitoring System Performance

Reporting dates 01/01/2018 00:00 through 03/31/2018 23:59

Pollutant: SO2 lb/MMBtu (365 Boiler Operating Day rolling average)
Emission Limit: 0.1

Company Name: SRP - Navajo, Unit 3
Address: Navajo Generating Station Page, AZ 86040
Unit Description: coal-fired cyclonic boiler power plant


Total source operating time in reporting period: 2035.7 hours

| Emission Data Summary(note 1) | | CEMS Downtime Summary(note 1) | |
|---------------------------------------------------|-------|------------------------------------------------|-------|
| 1. Duration of excess emissions in period due to: | | 1. Duration of CEMS downtime in period due to: | |
| a. Start Up/Shut Down..... | 0.0 | a. Monitoring Equipment Malfunction..... | 0.0 |
| b. Control Equipment Failure..... | 0.0 | b. Non-Monitoring Equipment Malfunction... | 0.0 |
| c. Process Problems..... | 0.0 | c. Quality Assurance..... | 1.0 |
| d. Exempt (Wet Stack - Scrubber Operation) | 0.0 | d. Other Known Monitor Downtime Cause..... | 0.0 |
| e. UnKnown Excess Emissions Cause..... | 0.0 | e. UnKnown Monitor Downtime Cause..... | 0.0 |
| 2. Total duration of excess emission..... | 0.0 | 2. Total duration of CEMS downtime..... | 1.0 |
| 3. Excess emission duration (%)..... | 0.00% | 3. CEMS downtime (%)..... | 0.05% |

Total source operating time in reporting period: = Time in the Report Period minus the Process Down Episode Time.

I have personally examined and am familiar with the information submitted in this document and all attachments and certify (based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information) that the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement(s) made in this document or its attachments may be punishable as a criminal offense."

Name: Walter H. Begay

Signature: 

Title: Air Quality Environmental Engineer

Date: 4/26/18

Navajo Unit 3 SO2 Excess Emission Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 1.0 lb/MMBtu, 3 hr. plant wide average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 3 SO2 Excess Emission Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.1 lb/MMBtu, 365 BOD rolling average

| <u>Date and Time Period</u> | <u>Magnitude</u> | <u>Reason</u> |
|-----------------------------|------------------|---------------|
|-----------------------------|------------------|---------------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 3 SO2 Downtime Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 3 SO2 ppm SOURCE: Unit 3 EPISODE: SO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------|
| 03/21/18 10:00 - 03/21/18 10:59 | | 1 | Quality Assurance Activities |

Total Duration = 1.0 hrs

Navajo Unit 3 CO2 Downtime Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 3 CO2 cor SOURCE: Unit 3 EPISODE: CO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------|
| 03/21/18 10:00 - 03/21/18 10:59 | | 1 | Quality Assurance Activities |

Total Duration = 1.0 hrs

Navajo Unit 3 NOx Excess Emission Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.24 lb/MMBtu, 30 Day rolling average

| Date and Time Period | Magnitude | Reason |
|----------------------|-----------|--------|
|----------------------|-----------|--------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 3 NOx Downtime Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 3 NOx cor SOURCE: Unit 3 EPISODE: NOx Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------|
| 03/21/18 10:00 - 03/21/18 10:59 | | 1 | Quality Assurance Activities |

Total Duration = 1.0 hrs

Navajo Unit 3 CO Excess Emission Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.23 lb/MMBtu, 30 Day rolling average

| Date and Time Period | Magnitude | Reason |
|----------------------|-----------|--------|
|----------------------|-----------|--------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 3 CO Excess Emission Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

Emission Limit: 0.15 lb/MMBtu, 12-Month rolling average

| Date and Time Period | Magnitude | Reason |
|----------------------|-----------|--------|
|----------------------|-----------|--------|

No Excess Emission

Total Duration = 0.0 hrs

Navajo Unit 3 CO2 Downtime Report

SRP - Navajo, Unit 3
Navajo Generating Station
Page, AZ 86040

Start: 01/01/2018 00:00
End: 03/31/2018 23:59

POLLUTANT: 3 CO2 cor SOURCE: Unit 3 EPISODE: CO2 Analyzer Downtime

| Incident Start | Incident End | Length Hrs. | Reason |
|---------------------------------|-----------------|----------------|------------------------------|
| 03/21/18 10:00 - 03/21/18 10:59 | | 1 | Quality Assurance Activities |

Total Duration = 1.0 hrs